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(54) LASER VELOCIMETRY DETECTION OF UNDERWATER SOUND

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(57) ABSTRACT

An apparatus for determining the velocity of sound waves which includes a liquid medium having a plurality of gas bubbles. In the liquid medium, a laser transmits a light pulse to interact with the bubbles excited by the sound wave. Backscattered light from the interaction of the light pulse is received. A processor is then responsive to the detector to provide detection of the acoustic wave through the fluid medium.

14 Claims, 2 Drawing Sheets

